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EXAMINER	
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1614	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/811,420	LIU ET AL.	
	Examiner	Art Unit	
	Zohreh Vakili	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/2/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-9 are presented for examination.

Applicant's Amendment filed February 2, 2007 has been received and entered into the present application. Accordingly, claims 1, 5, 6, 7, 8 are currently amended. Claims 1-9 are pending and are herein examined on the merits.

Applicant's arguments, filed February 2, 20067, have been fully considered. Rejections not reiterated from previous Office Actions are hereby withdrawn. The following rejections are either reiterated or newly applied. They constitute the complete set of rejections presently being applied to the instant application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Murad (US Patent No. 6630163 B1), in view of Murad (US Patent 5962517), and further in view of Gildenburg et al. (US Patent No. 6217852 B1) already of record, for the reasons of record set forth at pages 3-7 of the previous Office Action dated October 4, 2006.

Murad (Pat. No. 6630163 B1) teaches that a transition metal component and/or vitamin E may optionally be induced to assist in inhibiting or reducing inflammation (see col. 13, lines 29-31). Murad further teaches that some nonenzymatic antioxidants, such as Vitamin E (tocopherol), Vitamin A (beta-carotene), and Vitamin C (ascorbic acid) have been individually applied to assist the skin in scavenging free radicals (see col. 1, lines 44-48). The vitamin E component, when included, is typically present in topical formulations in an amount from about 5 to 40 weight percent, preferably from about 6 to 30 weight percent, and more preferably from about 7 to 20 weight percent of the composition (col. 13, lines 36-40). The vitamin C component, when used, is typically present in the pharmaceutical composition in an amount from about 0.1 to 50 weight percent, preferably from about 5 to 40 weight percent, and more preferably from about 10 to 25 weight percent (see col. 14, lines 51-55). Topical formulations of the composition, however, will typically include the vitamin A component in an amount from about 0.5 to 15 weight percent, preferably from about 1 to 10 weight percent (see col. 14, lines 58-65). Murad further teaches the use of fragrance in an amount of 0.01-1.0 weight percent (see col. 24, line 34). Deionized water is metered into a processing tank and high speed mixing is started (see col. 22, lines 1-2).

Murad (Pat. No. 5962517) in this invention teaches a pharmaceutical composition for the treatment of acne having an acne reduction component in an amount sufficient to reduce the redness and blemishes associated with acne. The invention also relates to pharmaceutical compositions having, in addition to the acne reduction component, a skin cell conditioning component in an amount sufficient to

properly regulate the keratin and sebum production of the skin cells, thereby inhibiting the appearance of acne. The composition further includes at least one of a vitamin C source, vitamin B complex, and a vitamin E source. The invention also relates to methods for treating acne by administering, alone or in conjunction with another composition, the pharmaceutical compositions in an amount therapeutically effective in reducing the incidence of acne and methods for additionally inhibiting the appearance of acne by conditioning skin cells (see abstract). Murad further teaches that the acne reduction component is a vitamin A source, a carotenoid component, a vitamin B_6 source, and a zinc component. In a preferred embodiment, the vitamin A source is present in about 0.005 to 5 weight percent, beta-carotene is present in about 0.1 to 10 weight percent (see col. 4, lines 56-65). The vitamin C source is calcium ascorbate present in about 1 to 30 weight percent (see col. 4, lines 18-19). The vitamin E source is present in about 1 to 30 weight percent (see col. 4, lines 29-30). Vitamin B complexes enhance the effectiveness of vitamin B_6 in treating the skin. Vitamin B complexes may be found in the present pharmaceutical composition in about 0.05 to 15 weight percent, preferably about 0.2 to 5 weight percent, and more preferably about 0.3 to 3 weight percent (see col. 8, lines 13-19).

Gildenberg et al: teaches a composition for use as a sunscreen applied during washing (see abstract). Preferred carriers for inclusions with compositions of the present invention include one or more surfactants (see col. 11, lines 29-30). Preferred surfactants include any one of a great variety of nonionic, cationic, anionic, and zwitterionic emulsifiers (see col. 11, lines 39-41). Generally, suitable surfactant types

include esters of glycerin, esters of propylene glycol, fatty acid esters of polyethylene glycol, carboxylic acid copolymers (see col. 11, lines 44-48). Gildenberg et al. further teaches the surfactant may be used individually or as a mixture of two or more. Regardless of the number selected the surfactant preferably comprise from about 0.1 percent to 40 percent, preferably from about 1.0 percent to about 20 percent, and most preferably from about 1.0 percent to about 10.0 percent of the composition of the present invention (see col. 12, lines 11-16). The composition of the present invention comprises from about 5.0 percent to about 95.0 percent, more preferably from about 10.0 percent to about 80.0 percent, and most preferably from about 30.0 percent to about 60.0 percent of purified water, according to the American Heritage Dictionary distilled water is purified or refined by distillation. The exact level of water will depend upon the form of the product and the desired moisture content (see col. 12, lines 31-37). Thickening agents or gellants may be added as desired to adjust the texture and viscosity of the composition. Such agents or gallants may be selected from Carbopol® resins and Pemulen® (see col. 13, lines 7-14). Optionally, various vitamins may be included in the composition of the present invention. Examples include vitamin A, vitamin C, vitamin B, and vitamin E (see col. 13, lines 15-23).

It would have been obvious to one skilled in the art to use the teachings of Murad (Pat. No. 6630163 B1) taken with Murad (Pat. No. 5962517) and combined with the teachings of Gildenberg et al. All three references teach that these components, Vitamin E, Vitamin C, carotene, Vitamin B complex are used in combination for topical administration. The motivation to combine the references is because Murad teaches

nonenzymatic antioxidants such as Vitamin E (tocopherol), Vitamin A (beta-carotene), and Vitamin C (ascorbic acid) have been individually applied to assist the skin in scavenging free radicals and neutralizing the harmful effects of UV light. Further Murad (Patent No. 5962517) relates to pharmaceutical compositions for treating acne and conditioning the skin cells by using vitamin C, vitamin B complex, vitamin E, and beta carotene. Gildenberg et al. introduces additional components such as surfactants, thickening agents, and inclusion of vitamin C, vitamin B, vitamin A and vitamin E in the composition of the invention.

The ranges of these ingredients are within the concentration range as presently claimed in the invention. It would have been obvious to one skilled in the art to use the teachings of Murad (Pat. No. 6630163 B1 and Pat. No. 5962517), Gildenberg et al., to modify the concentration ranges to come up with a composition for skin product to help shield the skin and to provide acne treatment.

Therefore, one having ordinary skill in the art at the time of invention was made would have been motivated to use the teachings of the prior arts cited above about the use and making of a composition for skin care as claimed in the present invention.

Thus the claimed invention was within the ordinary skill in the art to make and use at the time the claimed invention was made.

In the absence of any criticality/unexpected results presently claimed invention is considered *prima facie* obvious over the prior arts for the reasons cited above.

Applicant's amendments and remarks have been carefully considered in their entirety, but fail to be persuasive in establishing error in the propriety of the present rejection.

Applicant recites a topical composition including 1-3% carotene and amends the claims to be substantially free of vitamin A or vitamin A derivatives and further argues that carotene is a precursor to vitamin A and can be converted via multiple enzymatic steps to vitamin A in our body. Applicants newly added limitation of excluding vitamin A is contradicting with the dependent claim. Vitamin A is well known in the art as beta-carotene. The prior art specifically points out beta-carotene as an equivalent substitute for vitamin A (see Murad (Pat. No. 6630163 B1, col. 1, lines 44-48). Further, Applicant discusses the reference by Gildenburg et al. (US Patent No. 6217852). Applicant is reminded that the obviousness rejection is not an anticipation rejection. Murad clearly teaches all the components of the claimed invention in a transdermal topical composition with the exception of not disclosing different types of surfactant and its percent weight which are taught by Gildenburg et al. In obviousness rejection a combination of references is used, and the references are relied upon in combination and are not meant to be considered separately as in a vacuum. It is the combination of all of the cited and relied upon references that make up the state of the art with regard to the claimed invention. Applicant's claimed invention fails to patentably distinguish over the state of the art represented by the combination of the cited references. *In re Young*, 403 F.2d 754, 159 USPQ 725(CCPA 1968); *In re Keller 642 F.2d 413, 208 USPQ 871 (CCPA 1981).*

Moreover, it is noted that rejections under 35 U.S.C. 103(a) are based on combinations of references, where the secondary references are cited to reconcile the deficiencies of the primary reference with the knowledge generally available to one ordinary skill in the art to show that the differences between Applicant's invention and the prior art are such that they would have been modifications that were *prima facie* obvious to the skilled artisan. It is noted that the claimed invention is not required to be expressly suggested in its entirety by any one or all of the references cited under 35 U.S.C. 103(a). Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

For these reasons, and those already made of record at pages 3-7 of the previous Office Action dated October 4, 2006, of which such reasons are incorporated herein by reference, rejection of claims 1-9 remain proper and is **maintained**.

Conclusion

No claims of the present application are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zohreh Vakili whose telephone number is (571)-272-3099. The examiner can normally be reached on Monday-Friday (8:30 AM-5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on (571)-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Zohreh Vakili
Patent Examiner
Art Unit 1614

September 28, 2007

10/1/07
ARDIN H. MARSCHEL
SUPERVISORY PATENT EXAMINER